

## REMARKS

The final Office Action, mailed March 23, 2006, considered and rejected claims 23-28, 40-45, 51, 53-67, 69-74 and 84-86. Claims 23-26, 40-43 and 51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Hancock (U.S. Patent Publ. No. 2003/0135856). Claims 84-86 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Hancock (U.S. Patent Publ. No. 2003/0135856) and further in view of Official Notice. Claims 57 and 58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Hancock (U.S. Patent Publ. No. 2003/0135856) and further in view of ISO/IEC 13818-1. Claims 27, 28, 44, 45 and 53-56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Hancock (U.S. Patent Publ. No. 2003/0135856) and further in view of DeFreese (U.S. Patent No. 6,493,876). Claims 59-65 and 70-74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Wugofski (U.S. Patent No. 6,003,041). Claims 66, 67 and 69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Wugofski (U.S. Patent No. 6,003,041) and further in view of DeFreese (U.S. Patent No. 6,493,876).<sup>1</sup>

By this paper, claim 59 has been amended,<sup>2</sup> and no claims have been added or cancelled. Accordingly, following this paper, claims 23-28, 40-45, 51, 53-67, 69-74 and 84-86 remain pending, of which claims 23, 40, 59 and 71 are the only independent claims at issue.

The present invention is directed to embodiments for efficiently tuning to a channel of any of multiple broadcast types. As recited in claim 23, for example, a method for tuning a channel includes storing tuning information (e.g., channel identifiers) in service records. Additional tuning information is also extracted from one or more digital data streams that is necessary for subsequent tuning to one or more corresponding digital channels. The additional tuning information is stored and subsequently used to tune to the digital channels in such a way that it does not have to be re-extracted. However, when the additional tuning information is

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<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

<sup>2</sup> Support for the claim amendments is found throughout the specification, including, but not limited to, the disclosure on page 17, ll. 5-13, and page 20, ll. 3-12.

incorrect or outdated, and because it is incorrect or outdated, tuning to a selected channel is unsuccessful. In response to unsuccessful tuning to the channel, the service record is updated with updated tuning information that is thereafter used successfully to tune to the selected channel.

Claim 40 is directed to a computer program product for efficiently tuning to different channels and includes computer-readable media having computer-executable instructions for implementing the method of claim 23.

While Ko, which is the primary reference relied upon by the Examiner in rejecting claims 23 and 40, is generally directed to a channel managing apparatus and method for automatically switching to a tuner for receiving the type of broadcasting corresponding with a channel selected by a user, Applicants respectfully submit that Ko, even when combined with Hancock, fails to make obvious the claimed invention. For instance, the cited art, whether alone or in combination, fails to teach or suggest that when extracted additional tuning information is incorrect or outdated, tuning to a selected channel is unsuccessful due, at least in part, to the tuning information being incorrect or outdated and, therein response, updating the service record with updated information and using the updated information to successfully tune to the selected channel, as claimed, for example, in combination with the other recited elements.

In fact, the Examiner has acknowledged that Ko fails to disclose that when extracted additional tuning information is incorrect or outdated, unsuccessfully tuning to the selected channel due, at least in part, to the additional tuning information being incorrect or outdated, and, in response, updating the service record with updated information that is thereafter used to successfully tune to the selected channel. (Office Action, p. 5). For this teaching, the Examiner relies on the Hancock reference.

Hancock, however, similarly fails to teach that when tuning information is incorrect or outdated, tuning to a selected channel is unsuccessful because the information is incorrect or outdated, and, in response, updating the service record with updated information used to successfully tune to the selected channel. In fact, Hancock teaches that incorrect information is updated *when the system successfully tunes* to a channel and can extract data from the channel.

In particular, Hancock discloses a system for correcting a channel map in an electronic program guide (EPG) to avoid duplicate listings of the same stations so as to conserve memory and avoid cluttering of the guide. (¶¶ 2, 3). In the disclosed system, an EPG includes a channel

map containing a listing of available channels and the television call letters related to the respective channel allocation. (¶¶ 4, 8). When setting up a channel map, a search is initiated and the tuner tunes to a television channel that is included in the channel map. (¶¶ 4, 18). After tuning to the television channel, the system extracts the call letters for the received station and compares them with the channel label stored in the channel map. (¶¶ 4, 20). If the extracted channel label matches the channel map data, nothing is done. (¶¶ 4, 21). Alternatively, if the data does not match, the channel map is updated. (¶¶ 4, 21).

Accordingly, Hancock appears to disclose a television EPG system in which channel map information is corrected, and only after successfully tuning to the channel, whose map is being updated. Hancock clearly fails to teach or suggest that when the extracted additional tuning information is incorrect or outdated, the system unsuccessfully attempts to tune to the channel. In fact, Hancock appears to teach just the opposite, that a channel must first be accessed before it can be determined whether the information is correct. In other words, Hancock teaches that a channel is accessed regardless of whether the stored channel map information is correct or not. As a result, Hancock and Ko, alone and in combination, fail to teach or suggest each and every limitation of the present invention.

As noted previously, claims 59 and 71 have been rejected under 35 U.S.C. § 103(a) as unpatentable over Ko in view of Wugofski. Claims 59 and 71 are directed to corresponding embodiments relating to the user experience for navigating to and selecting a channel to be tuned to. As recited, these claims include storing a plurality of service records which each contain tuning information for tuning to various channels. The service records are also categorized into service spaces that are displayed to a user. As clarified by the above amendment, categorization of service records is based, at least in part, on the content of the broadcast rather than the type of broadcast used to deliver the data. When one of the service spaces is selected, the corresponding service record information is displayed. Then, when one of these corresponding service records is selected, the channel corresponding to the selected service record is tuned using the tuning information provided in the service record.

Applicant respectfully submits that these recited embodiments are clearly distinguished from the cited art of record. In particular, the cited art fails to disclose or suggest, among other things, that service records displayed to a user are categorized according to a broadcast content type that is other than the broadcast type. In fact, the cited disclosure of Ko discloses channels

that "are provided from multiple sources and assembled into a single channel map" and in which channels are ordered in the channel map and selected *based on the broadcast type*. (Ko, Col. 5, ll. 10-34; Ko, Col. 6, ll. 35-44). Moreover, while the Office Action takes the position that a broadcast type (e.g., analog broadcast, cable broadcast, digital ground wave, satellite broadcast, etc.) can also be a content type (see Office Action, p. 2), the claims have been amended to clarify that the content type is distinguished from the broadcast type, thereby helping the Examiner to apply a correct interpretation to the claims and art in view of the disclosure found in the application.<sup>3</sup>

Similarly, the cited disclosure of Wugofski fails to disclose categorizing service records into a plurality of service spaces according to content type, as claimed. In particular, Wugofski (Figure 6) appears to disclose a channel map database structure in which different columns are used to identify categories corresponding to different types of information that can be used for tuning to a channel. For instance, logical and physical channels, a source, a receiving device, and a name may be saved. Applicants respectfully submit that these column categories fail to identify a content type, or to organize/categorize a plurality of service records into a plurality of service spaces according to content type, as claimed in combination with the other recited claim elements.

Claim 86, which was presented as a dependent claim, recites an embodiment in which the method for tuning to a channel includes *receiving aggregate information* corresponding to *a plurality of different channels* over a single channel. As also noted above, this claim was rejected under 35 U.S.C. § 103(a) in partial reliance upon Official Notice. In particular, the Office Action takes Official Notice that "it is notoriously well known in the art to receive channel information of a single channel so as to efficiently receive channel information." (Office Action, p. 6). Applicant notes that assuming, *arguendo*, that the Official Notice is

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<sup>3</sup> Applicant respectfully submits that the amendment is not narrowing in scope and merely clarifies that which was already inherent in the claim. In particular, while claims are examined by giving them their broadest "reasonable" interpretation, the interpretation cannot be one which is inconsistent with the specification. (M.P.E.P. § 2111). In Applicant's specification, content is clearly distinguished from broadcast type. For example, Applicant's specification notes that service spaces may be categorized by tuner or broadcast type (e.g., AM radio, FM radio, analog terrestrial airwave, digital terrestrial airwave, analog cable, digital cable, analog satellite, digital satellite, and so forth). (p. 20, ll. 3-7; p. 4, ll. 7-11). In addition, however, service spaces may also be categorized according to content (e.g., sports, cartoons, news, movies, children, educational, etc.), such that categorization is "not just by tuner or broadcast type." (p. 20, ll. 10-12; p. 17, ll. 11-13). Inasmuch as content is described as different than broadcast type, and because each disclosed example of content is clearly not a broadcast type, Applicant submits that interpreting content to include broadcast types is inconsistent with the specification and, accordingly, is not a reasonable interpretation of Applicant's claims.

proper, it fails to establish a *prima facie* case of obviousness. In particular, claim 86 recites receiving *aggregate* information corresponding to a *plurality of different channels* over a single channel, while Official Notice was taken merely to support the assertion that it is well known to receive channel information of a *single channel*. Accordingly, even if this assertion was treated as fact, it does not read on the claims that require that *aggregate* information corresponding to a *plurality of different channels* is received, as claimed in combination with the other recited elements. Accordingly, inasmuch as the cited art and Official Notice fail to teach or suggest each element of the claim, Applicant submits that claim 86 is allowable over the cited art as well as the asserted Official Notice.

In view of the foregoing comments regarding Official Notice and with specific regard to the Examiner's remarks regarding Official Notice in the last action, Applicant also respectfully disagrees with the Examiner's assertion that Applicant failed to adequately traverse the Official Notices relied upon by the Examiner and such that it is now admitted prior art. In support of the Examiner's assertion, the Examiner relied upon 37 C.F.R. § 1.111(b) and *In re Chevenard*, 139 F.2d 711, 713, 60 U.S.P.Q. (BNA) 239, 241 (C.C.P.A. 1943); however, neither citation is supportive of such an assertion. For example, while *In re Chevenard* generally supports the contention that Official Notice can be traversed only by including a specific statement of why the noticed fact is not well-known in the art, *In re Chevenard* should only be read to apply to situations where there has been found an "absence of any demand by [Applicant] for the examiner to produce authority for his statement." *In re Chevenard*, 60 U.S.P.Q. (BNA) at 241 (*emphasis added*). In the last response, however, Applicant specifically made such a demand for authority for the taken Official Notice. (See p. 18 of Amendment "F"). Consequently, *In re Chevenard* is inapplicable for the present case and, as a result, Applicant's traversal in the last response was not inadequate. Further, while 37 C.F.R. § 1.111(b) deals generally with the sufficiency of a response, it does not expressly treat any aspect of traversing Official Notice. Accordingly, in light of the above, Applicant renews the specific request for references supporting the teachings officially noticed in the Office Action, as well as the required motivation or suggestion to combine references with the other art of record.

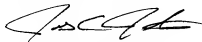
In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the

purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should it arise.

For at least the foregoing reasons, Applicant respectfully submits that the pending claims are neither anticipated by nor made obvious by the art of record. In the event that the Examiner finds and remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 23<sup>rd</sup> day of May, 2006.

Respectfully submitted,



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